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EXAMINER	
CHOW, YUK	

ART UNIT	PAPER NUMBER
2609	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/808,537	ODA ET AL.	
	Examiner	Art Unit	
	Yuk C. Chow	2609	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-29* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-29* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *march 25 2004* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. The numbering of claims is not in accordance with 37 CFR 1.126 which requires the original numbering of the claims to be preserved throughout the prosecution. When claims are canceled, the remaining claims must not be renumbered. When new claims are presented, they must be numbered consecutively beginning with the number next following the highest numbered claims previously presented (whether entered or not). Misnumbered claims 20-28 have been renumbered 21-29 respectively.

Drawings

2. Figure 10 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the

applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims **1-29** are rejected under 35 U.S.C. 102(e) as being anticipated by Ely et al. (US Patent 6,888,538).

As to claim **1**, Ely discloses a position detection system (Fig. 1) comprising a position pointer (Fig. 1(5)) including at least one coil (Fig. 3(45)), for pointing to a position, and a position detector (Fig. 1) for detecting the position pointed to by the position pointer by transmitting and receiving a signal (Fig. 3(39-1,39-2) to and from the position pointer by means of electromagnetic coupling (Col. 6 lines 42-63), the position detector comprising: a plurality of transmission coils (Fig. 7a (29)) for transmitting a signal to detect the position to the position pointer (Fig. 1(5)); a plurality of sensor coils (Fig. 3(31-37)) for receiving the signal transmitted from the position pointer; signal transmission means (Fig. 3(39-2, 39-3, 39-4, 39-5)) for selecting one of the plurality of transmission coils in accordance with the position of the position pointer and driving the selected transmission coil so as to transmit the signal to detect the position (Col. 6 lines 4-63); reception means (Fig. 3(39-1)) for selecting the plurality of sensor coils one by one and receiving the signal transmitted from the position pointer (Col. 6 lines 42-63); and position detection means for detecting the position pointed to by the position pointer in accordance with the signal received by the reception means (Col. 10 lines 6-31).

As to claim **2**, Ely discloses a position detection system according to claim 1, wherein the plurality of transmission coils are disposed so as to be coaxial with each other (Fig. 8a).

As to claim **3**, Ely discloses a position detection system according to claim 1, wherein the signal transmission means defines a plurality of sub areas (Fig. 7b-7g) in the sensor area in which the plurality of transmission coils (Fig. 7b (31-1,31-2)) are disposed, selects a transmission coil capable of supplying a strongest signal (Fig. 5, 6) to detect the position to the position pointer depending on a particular sub area in which the position pointer is located, and drives the selected transmission coil thereby supplying the signal to detect the position to the position pointer (Col. 9 line 3 Col. 10 line 5).

As to claim **4**, Ely discloses a position detection system according to claim 1, wherein, depending on the relative spatial relationship between the selected transmission coil and the position of the position pointer detected by the position detection means (Col. 6 lines 3-23), the signal transmission means drives the selected transmission coil such that the phase of the signal (Fig. 4a, 4b) to detect the position supplied to the position pointer is maintained without being inverted (Col. 6 lines 24-63).

As to claim **5**, Ely discloses a position detection system according to claim 4, wherein, depending on whether the position pointer is located in the inside (Fig. 7c(33-13)) or the outside (Fig. 7c(33-8)) of the selected transmission coil, the signal transmission means inverts the phase of the signal by which to drive the transmission coil such that the signal to detect the position supplied to the position pointer is maintained unchanged in terms of its phase (Col. 8 lines 1-57).

As to claim **6**, Ely discloses a position detection system according to claim 1, wherein the plurality of transmission coils include a first transmission coil (Fig. 7c(33-

13)) and a second transmission coil (Fig. 7c(33-8)) disposed outside the first transmission coil, the first and second transmission coils being coaxial with each other (Fig. 7c).

As to claim **7**, Ely discloses a position detection system according to claim 6, wherein three sub areas (Fig. 7c(33-2,33-8,33-13)) are defined in the sensor area in which the position of the position pointer is detectable, the three sub areas including a first area in which when the signal to detect the position is transmitted in a first phase (Fig. 4a(E31) at peak), the first transmission coil (Fig. 7c(33-13)) is capable of transmitting the signal to detect the position with a greater signal level than the second transmission coil can, a second area in which when the signal to detect the position is transmitted in the first phase, the second transmission coil is capable of transmitting the signal to detect the position with a greater signal level than the first transmission coil can, and a third area (Fig. 7c(33-2)) in which when the signal to detect the position is transmitted in a second phase (Fig. 4a(E31) at trough) opposite to the first phase, the first transmission coil is capable of transmitting the signal to detect the position with a greater signal level than the second transmission coil can, and wherein the signal transmission means transmits the signal to detect the position in the first phase from the first transmission coil when the position pointer is located in the first area (Fig. 7c(33-13)), the signal transmission means transmits the signal to detect the position in the first phase from the second transmission coil when the position pointer is located in the second area (Fig. 7c(33-8)), and the signal transmission means transmits the signal to

detect the position in the second phase from the first transmission coil when the position pointer is located in the third area (Col. 7 line 14-Col. 8 line 42).

As to claim **8**, Ely discloses a position detection system according to claim 7, wherein the reception means sequentially selects a predetermined number of sensor coils located in the first area (Fig. 7c(33-13)) and an area adjacent to the first area and receives the signal transmitted from the position pointer when the position pointer is located in the first area, the reception means sequentially selects a predetermined number of sensor coils located in the second area (Fig. 7c(33-8)) and an area adjacent to the second area and receives the signal transmitted from the position pointer when the position pointer is located in the second area, and the reception means sequentially selects a predetermined number of sensor coils located in the third area (Fig. 7c(33-2)) and an area adjacent to the third area and receives the signal transmitted from the position pointer when the position pointer is located in the third area (Col. 10 line 32-Col. 12 line 48).

Regarding claims **9-16**, limitations within these claims are identical to claims **1-8** respectively, except the subject matter is a **position detector** instead of **position detection system**. Therefore, same rejections apply to these claims.

Regarding claims **17-20**, limitations within these claims are identical to claims **1-4** respectively, except the subject matter is a **power conserving position detector** instead of **position detection system**. Therefore, same rejections apply to these claims.

As to claim **21**, Ely discloses a power conserving position detector according to claim 17, wherein said position detection means is configured to provide user input data to a portable data processing device (Fig. 3(59) digital processing device).

As to claim **22**, Ely discloses a power conserving position detector according to claim 17, wherein said position detection means is configured to provide user input data to a personal digital assistant (Fig. 1).

As to claim **23**, Ely discloses a power conserving position detector according to claim 17, wherein said position detection means is configured to provide user input data to a mobile telephone (Fig. 16).

As to claim **24**, Ely discloses a power conserving position detector according to claim 17, wherein said position detection means is configured to provide user input data to a personal computer (See Abstract).

As to claim **25**, Ely discloses a method for transmitting an electromagnetic wave (Fig. 4a(31)) from a position detector (Fig. 1) to a position pointer carrying a resonant circuit (Fig. 3(41)), comprising: (a) providing, in the position detector, a plurality of sensor coils (Fig. 3(31-37)) and at least one transmission coil (Fig. 3(45)) for transmitting a signal to detect the position of the position pointer, said transmission coil comprising a resonant circuit tuned to resonate at a selected resonant frequency (Fig. 3(53)); (b) energizing said transmission coil with a pulsed carrier signal (Fig. 3(39-1)) at said selected transmission coil resonant frequency; (c) receiving said pulsed carrier signal in said position pointer resonant circuit and, in response, radiating a pulsed position pointer signal (Fig. 3(39-2)).

As to claim **26**, Ely discloses a method of claim 25, further comprising: (d) receiving said pulsed position pointer signal in said position detector sensor coils (Col. 6 lines 24-63).

As to claim **27**, Ely discloses a method of claim 25, wherein the step of providing said at least one transmission coil comprising a resonant circuit (Fig. 3(41)) comprises providing an inductive transmission coil (Fig. 3(45)) connected in series with a capacitor (Fig. 3(43)).

As to claim **28**, Ely discloses a method of claim 25, wherein the step of providing said at least one transmission coil comprises providing first and second transmission coils, said first transmission coil being wound proximate to the periphery of the position detector sensor coils along a first path (Fig. 7c(33-13)); and wherein said second transmission coil is wound proximate to the periphery of the position detector sensor coils along a second path (Fig. 7c(33-8)) not coextensive with said first path.

As to claim **29**, Ely discloses a method of claim 28, further comprising: (d) energizing solely said first transmission coil (Fig. 3(39-1)) with said pulsed carrier signal (Fig. 4a(E31)) at said selected resonant frequency; and (e) energizing solely said second transmission coil with said pulsed carrier signal at said selected resonant frequency (Col. 6 line 64-Col. 7 line 13).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yuk C. Chow whose telephone number is 571 270-1544. The examiner can normally be reached on 8-6 M-TH E.T..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amare Mengistu can be reached on 571 270-1550. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

yc

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SUPERVISORY PATENT EXAMINER